

FORM PTO-1390 (Modified)
(REV 11-98)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

204296US0PCT

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR

09/787409

INTERNATIONAL APPLICATION NO.

PCT/FR00/01458

INTERNATIONAL FILING DATE

26 MAY 2000

PRIORITY DATE CLAIMED

21 JULY 1999

TITLE OF INVENTION

**COMB FOR APPLYING A PRODUCT TO KERATINOUS FIBERS, APPLICATOR SET EQUIPPED THEREWITH
AND USE OF THIS SET**

APPLICANT(S) FOR DO/EO/US

Jean-Louis GUERET

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☒ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ A copy of the International Search Report (PCT/ISA/210).
8. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
9. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
10. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 13 to 20 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A change of power of attorney and/or address letter.
19. ☐ Certificate of Mailing by Express Mail
20. ☒ Other items or information:

Request for Consideration of Documents Cited in International Search Report
Notice of Priority
Drawings (3 sheets)
PCT/IB/308

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.53) <div style="font-size: 1.5em; font-weight: bold; margin-top: 5px;">09/787409</div>	INTERNATIONAL APPLICATION NO. <div style="font-weight: bold; margin-top: 5px;">PCT/FR00/01458</div>	ATTORNEY'S DOCKET NUMBER <div style="font-weight: bold; margin-top: 5px;">204296US0PCT</div>
--	--	---

21. The following fees are submitted:

BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :

- | | |
|--|-------------------|
| <input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO | \$1,000.00 |
| <input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO | \$860.00 |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO | \$710.00 |
| <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) | \$690.00 |
| <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) | \$100.00 |

ENTER APPROPRIATE BASIC FEE AMOUNT =

CALCULATIONS PTO USE ONLY

Surcharge of **\$130.00** for furnishing the oath or declaration later than ☒ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).

\$860.00

\$130.00

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	23 - 20 =	3	x \$18.00		\$54.00
Independent claims	1 - 3 =	0	x \$80.00		\$0.00
Multiple Dependent Claims (check if applicable).				<input type="checkbox"/>	\$0.00

TOTAL OF ABOVE CALCULATIONS =

\$1,044.00

Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28) (check if applicable).

☐

\$0.00

SUBTOTAL =

\$1,044.00

Processing fee of **\$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).

+

\$0.00

TOTAL NATIONAL FEE =

\$1,044.00

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).

☐

\$0.00

TOTAL FEES ENCLOSED =

\$1,044.00

Amount to be:	\$
refunded	
charged	\$

- ☒ A check in the amount of **\$1,044.00** to cover the above fees is enclosed.
- ☐ Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- ☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **15-0030** A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:



22850

Surinder Sachar
Registration No. 34,423

(703) 413-3000

SIGNATURE

Norman F. Oblon

NAME

24,618

REGISTRATION NUMBER

DATE

March 21 2001

09/787409

JC03 Rec'd PCT/PTO 21 MAR 2001

204296US0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :
JEAN-LOUIS GUERET : ATTN: NEW APPLICATION DIVISION
SERIAL NO: NEW US PCT APPLN. :
(Based on PCT/FR00/01458)
FILED: HERewith :
FOR: COMB FOR APPLYING A :
PRODUCT TO KERATINOUS
FIBERS, APPLICATOR SET
EQUIPPED THEREWITH
AND USE OF THIS SET

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend the above-identified application as follows:

IN THE CLAIMS

Please cancel Claims 1-23 and add the following claims:

--24. (New) A comb for applying a product to keratinous fibers, particularly the eyelashes or eyebrows, comprising an arrangement of teeth capable of applying said product, characterized in that said arrangement of teeth is obtained by assembling at least two separate parts.

25. (New) The comb as claimed in claim 24, wherein the to parts are obtained by molding thermoplastic in a single piece and are joined together pivotably by a film hinge.

26. (New) The comb as claimed in claim 25, wherein after molding, the parts are

09/787409

assembled by snap-fastening, by welding or by bonding.

27. (New) The comb as claimed in claim 24, wherein the parts are obtained by molding separate thermoplastic parts which are then assembled by snap-fastening, by welding or by bonding.

28. (New) The comb as claimed in claim 24, wherein at least one of the parts comprises a succession of teeth configured in the form of at least one row connected to a base of elongate shape extending along an axis.

29. (New) The comb as claimed in claim 24, wherein the teeth are offset in a staggered configuration alternating from side to side of a surface formed, in particular, of a plane along which the two parts meet.

30. (New) The comb as claimed in claim 28, wherein when viewed along the axis, two consecutive teeth have free ends which diverge, which converge or which cross.

31. (New) The comb as claimed in claim 29, wherein, when viewed from the side, two consecutive teeth have free ends which diverge, which converge or which cross.

32. (New) The comb as claimed in claim 30, wherein when viewed from the side, two consecutive teeth form between them a notch, particularly a V-shaped notch.

33. (New) The comb as claimed in claim 29, wherein the teeth have front and/or rear faces which are parallel to the meeting surface and which form an acute obtuse angle therewith.

34. (New) The comb as claimed in claim 24, wherein the comb is secured to an element for grasping.

35. (New) The comb as claimed in claim 24, wherein the two parts are assembled by snap-fastening means, said snap-fastening means consisting of at least one male/female system with two complementary elements, one arranged on a first part and the other on a

second part of the comb.

36. (New) The comb as claimed in claim 25, wherein the film hinge is oriented at right angles to the axis.

37. (New) The comb as claimed in claim 25, wherein the film hinge is oriented parallel to the axis.

38. (New) The comb as claimed in claim 36, wherein the comb is fixed to said element for grasping by an end located away from the film hinge.

39. (New) The comb as claimed in claim 24, which comprises a means capable of consolidating the assembly of the two parts.

40. (New) The comb as claimed in claim 25, wherein the thermoplastic contains agents intended to improve the slip along the eyelashes, such as graphite, molybdenum disulfide or Teflon.

41. (New) The comb as claimed in claim 24, wherein the parts are made of different materials.

42. (New) The comb as claimed in claim 24, wherein at least one portion of at least one of the parts is covered in flocking.

43. (New) The comb as claimed in claim 24, wherein as the parts are being assembled, a layer of absorbent material is inserted between two parts.

44. (New) The comb as claimed in claim 24, wherein said absorbent material is chosen from open-cell or semi-open-cell foams, felts, wovens and nonwovens.

45. (New) A set for applying a product, particularly a cosmetic product, to the eyelashes or eyebrows, comprising a container for containing a reserve of product, possibly a wringing-out member, and an applicator capable of being arranged removably on the container, said applicator comprising an element for grasping equipped with a comb as claimed in claim 24.

46. (New) The use of a set as claimed in claim 45 for applying make-up to the eyelashes or eyebrows.--

REMARKS

Claims 24-46 are active in the present application. Support for the claims is found in Claims 1-23 and the specification as filed herewith. No new matter is believed to have been added by these amendments. An action on the merits and allowance of the claims is solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Daniel J. Pereira, Ph.D.
Registration No. 45,518



22850

(703) 413-3000
Fax #: (703) 413-2220
NFO:DJP\cct

I:\user\DJPER\204296US-pr.wpd

3/parts

COMB FOR APPLYING A PRODUCT TO KERATINOUS FIBERS,
APPLICATOR SET EQUIPPED THEREWITH AND USE OF THIS SET

5 The present invention relates to a comb for applying a product to
keratinous fibers, particularly the eyelashes or eyebrows. The invention
also relates to a set of the type comprising a container for containing a
reserve of product and an applicator comprising a wand equipped with an
applicator element in the form of such a comb. A wringing-out member may
10 possibly be provided in the container to spread the product out on the
comb and/or to remove any excess product as the applicator element is
being extracted.

The invention relates more specifically although not exclusively to a comb
15 for the eyelashes or eyebrows and comprising at least one row of teeth
connected to a base of elongate shape.

Packaging and applicator devices in which the applicator element consists
of a comb with a row of teeth which can become laden with product when
20 the applicator is extracted from the container containing the product are
known.

The implantation of the teeth on the comb is a decisive factor in the
applying of the product, particularly to the eyelashes. For a product of given
25 rheology, each implantation corresponds to a make-up effect the
characteristics of which differ. Thus, depending on the implantation of the
teeth, the make-up effect will be light, heavy, curling, lengthening, etc.
Quite obviously there are other factors which influence the product
application characteristics, the most important one probably being the
30 product itself.

09/7 87 409 094704

Such combs are generally obtained by molding, particularly of a thermoplastic. One of the problems that may arise with such combs stems from the difficulty there is in multiplying the types of implantation and thus, as a result of this, in multiplying the types of make-up effect that can be obtained. The problem is that each new implantation of the teeth aimed at obtaining a new make-up effect requires the use of a new mold. Furthermore, the constraints related to mold release have to be accounted for each time.

- 10 As a result, there is a need to configure such combs in such a way that the type of implantation of the teeth in the comb can be multiplied and therefore that the types of make-up effect that can be obtained can correspondingly be multiplied. In other words, there is a need to be able to give such combs configurations (tooth implantation) that it would be difficult to obtain with the manufacturing techniques commonly employed.

There is also a need to produce a comb for applying a composition, particularly a cosmetic or care composition, particularly to the eyelashes, and which is easy to manufacture and has repeatable geometry.

20

Hence, the present invention relates to a comb for applying a product to keratinous fibers, particularly the eyelashes or eyebrows, comprising an arrangement of teeth capable of applying said product. This comb is characterized in particular in that said arrangement of teeth is obtained by assembling at least two separate parts.

25

- The parts advantageously have a configuration such that said arrangement of teeth is not formed until after these parts have been assembled. To that end, each part advantageously comprises at least one portion intended to collaborate with a corresponding portion belonging to another part. Said arrangement of the teeth is thus produced, after the parts have been assembled, on the comb in its final form.

30

Advantageously, the teeth are arranged in the form of at least one row, and are connected to a base, particularly one of elongate shape, extending along a longitudinal axis. More particularly, a two-part embodiment is preferred.

Thus, and according to the invention, each of the separate parts can, in combination with the other part, play a part in forming all or some of the teeth of one or more rows. As an alternative, a certain number of teeth of one or more rows may be formed on one part while the remainder of the teeth may be formed on the other part.

As a preference, two parts of the arrangement are obtained by molding thermoplastic in a single piece and are joined together pivotably by a film hinge.

Advantageously, said film hinge connects the bases of the two parts. Advantageously also, after molding and once one of the parts has been folded onto the other, the two parts are assembled, for example by snap-fastening, wedging, welding, bonding or by any other appropriate means.

Alternatively, two parts can be obtained by molding thermoplastic in the form of two separate parts which are assembled by snap-fastening, welding, bonding or by any other appropriate means.

As a preference, the two parts are shaped in such a way that, after assembly, the teeth of the two parts are offset in a staggered configuration alternating from side to side of a separation surface consisting, in particular, of a plane along which the two parts meet.

Advantageously, when the comb is viewed along said longitudinal axis, two consecutive teeth of one row have free ends which diverge from one

another, which converge toward one another or which even cross one another.

Similarly, when the comb is viewed from the side, two consecutive teeth
5 may have free ends which diverge or which converge to such an extent that they might cross.

Thus, when the comb is viewed from the side, two consecutive teeth form
between them a notch, for example a V-shaped notch, capable of gripping
10 the eyelashes and encouraging the product to spread out along the eyelashes with the comb entwined therein.

In order to increase the ability to catch hold of the eyelashes, the teeth may
have front and/or rear faces which are parallel to the meeting surface and
15 which form an acute or obtuse angle therewith.

Advantageously, and this is to make the device easier to grip, the comb is
secured to an element for grasping connected directly or by means of a
wand to the comb. This element for grasping may be connected to the base
20 of the comb from one of the ends of the base, more or less in line with the element for grasping. Alternatively, the arrangement of teeth is oriented at right angles to a longitudinal axis of the element for grasping.

When the comb is assembled by snap-fastening two separate parts, said
25 snap-fastening can be performed using at least one male/female system consisting of two complementary elements, which complementary elements are arranged one on a first part and the other on the second part of the comb.

30 When the comb comprises a film hinge, the latter is preferably oriented at right angles to said axis of orientation of the teeth. According to this particular embodiment, the film hinge is formed near one face of the base

located away from the face on which the teeth are implanted. According to one particular embodiment, the film hinge is located at the bottom of a groove directed axially to said comb.

- 5 Alternatively, the film hinge may be oriented at right angles to the longitudinal axis of the comb.

According to one embodiment, the parts may be assembled by said element for grasping, for example by attachment to one end of the two
10 parts which is arranged away from the film hinge.

According to another method of assembling the two parts, the two parts are assembled by the collaboration of the two parts forming the arrangement of teeth and of a portion of the element for grasping, particularly an end
15 portion of the element for grasping.

The height of the teeth can vary. By way of example, the height of these teeth may be between 0.5 and 10 mm.

- 20 Depending on the make-up characteristics desired, the comb may be made of a rigid, semi-rigid or soft thermoplastic, for example of an elastomer with an appropriate bending modulus.

Another subject of the invention is a set for applying a product, particularly
25 a cosmetic product, to the eyelashes or eyebrows, comprising a container for containing a reserve of product and possibly fitted with a wringing-out member, and an applicator capable of being fixed, removably, on the container. This set further comprises an element for grasping equipped at one end with a comb as defined hereinabove. An appropriate wringing-out
30 member is described, for example, in document FR-A-2 745 272.

The applicator set of the invention can be used, in particular, for applying make-up to the eyelashes or eyebrows.

The invention will be better understood from reading the detailed description which will follow of non-limiting exemplary embodiments and from examining the appended drawing, in which:

- figure 1 is a perspective view of an applicator comb 1 according to one embodiment of the invention, shown in the unassembled configuration;
- figure 2 is a view in cross section on II-II of figure 1;
- figure 3 is a perspective view of the comb of figure 1, shown in the assembled configuration;
- figure 4 is a view in cross section on IV-IV of figure 3;
- figure 5 illustrates another embodiment of an applicator comb 101 according to the invention, while it is in the process of being mounted on an element 20 for grasping;
- figures 6 and 7 illustrate another embodiment of an applicator comb 201, shown respectively in a configuration before and after assembly;
- figures 8 and 9 illustrate alternative forms of the applicator comb 1 of figures 1 to 4;
- figure 10 illustrates another embodiment of an applicator comb 301, shown in the unassembled configuration;
- figure 11 is a schematic view in axial section of a packing and applicator set A, according to the invention, equipped with the applicator comb 1 according to the embodiment according to figures 3 and 4.

A first embodiment of a comb 1 for applying a product to the eyelashes or eyebrows has been depicted with reference to these figures, particularly to figures 1 to 4. The product intended to be applied is, in particular, a mascara of liquid to pasty consistency.

As can be seen in particular in figures 1 and 2, the comb 1 consists of a first part 2 and of a second part 3 of elongate shape and both oriented

along an axis X. The two parts 2 and 3 are joined together by a film hinge 4 formed between the respective bases 2b, 3b of said parts 2, 3. A meeting plane S forms a plane of symmetry between the two parts 2, 3. The bases 2b, 3b each carry a succession of teeth 2a, 3a. Thus, a succession of the teeth 2a forms a straight row of teeth implanted on the base 2b of the part 2. Similarly, a succession of teeth 3a forms a straight row of teeth implanted on the base 3b of the part 3. The two bases 2b and 3b constitute the dorsal part of the comb. According to the embodiment considered, the implantation of the teeth 2a, 3a is such that the teeth 2a of the first part 2 alternate with the teeth 3a of the second part 3. The edges of the bases away from the edges on which the teeth are implanted are separated by a groove 5 of V-shaped cross section. The point of the V forms said film hinge 4.

The film hinge allows the comb to be released from the mould in the configuration illustrated in figures 1 and 2 and allows the two parts 2, 3 to be assembled by pivoting about said film hinge 4 to obtain the comb in a configuration for use, as depicted in figures 3 and 4.

In the as-moulded configuration, there is a large gap between the free ends of the teeth 2a and the free ends of the teeth 3a.

This configuration makes it possible to produce teeth with complex shape and complex implantations on the bases 2b, 3b, which shapes and implantations would be difficult to achieve if the comb were made of a single piece. Thus, for example, according to the invention, it is possible to produce combs in which the teeth of the first part penetrate between teeth in the row of the second part. It is also possible to produce a first part with teeth inclined in a first direction and a second part with teeth inclined in a second direction different from the first. In particular, it is possible, according to the invention, to produce combs in which the overall

orientation of the teeth implanted on the first part is not parallel to the overall orientation of the teeth implanted on the second part.

In order to obtain the comb in the configuration for use, as depicted in figures 3 and 4, once the two parts 2b, 3b have been brought closer together by pivoting about the axis of the film hinge 4, the first part 2 may be fixed to the second part 3 by bonding, by welding, by snap-fastening or by wedging.

Such wedging is illustrated in figure 3. It can be seen that one end of the comb is continued in the form of a portion 6 of triangular cross section. This portion 6 is pushed into a hole 12 of corresponding cross section made in the end 10b of a wand 10a. This arrangement makes it possible both to assemble the two parts 2, 3 and to connect the comb to a gripping member 10, to which the wand 10a is secured (figure 11). An applicator 13 that is ready for use is thus formed.

Figure 5 illustrates another type of attachment of a comb 101 to an element 20 for grasping to form an applicator 113. The element 20 for grasping has an elongate flattened shape and is connected by means of a flat wand 10 to a parallelepipedal housing 22, one end 22a of which is open. The housing 22 is able to accommodate the base of a comb 101. The comb 101 has approximately the same structure as the comb 1 described previously in the assembled configuration with reference to figure 3. Hence, the comb 101 is formed by assembling two parts 2, 3, which parts are connected by a film hinge 4. The housing 22 holds the two parts in the assembled configuration and also forms a means of connecting the comb to the element 20 for grasping.

Figure 6 illustrates another embodiment of an applicator comb 201, in which two parts 202, 203 are molded separately. To allow easy and precise assembly of these two parts, means of mechanical assembly are provided.

For this purpose, the base 202b of the first part 202 is provided with two openings 207. The base 203b of the second part 203 is provided with two pegs 206 capable of fitting tightly into the openings 207 in the first part. The assembly elements may have a profile, for example the shape of a dovetail,
 5 that allows a lasting snap-fastening of the two parts 202, 203. Figure 7 illustrates the comb 201 in its assembled configuration.

Figure 8 illustrates another embodiment whereby the comb 1 is assembled by clamping. In this embodiment, the two parts 2, 3 of the comb 1 are
 10 connected by a film hinge formed near the dorsal face of the comb 1. Each base 2b, 3b on its outer face has an indentation 2c, 3c oriented parallel to the film hinge 4 so as to delimit a portion of the cylinder. A wand 10a is designed to hold the two parts 2, 3 in the assembled configuration. For this purpose, the wand 10a is hollow and has a longitudinal opening 10c so that
 15 it forms a channel section delimited by two longitudinal edges 10b. This channel section advantageously has a length that more or less corresponds to the axial dimension of the comb. The channel section is shaped in such a way that the cylindrical portion of the bases 2b, 3b can be slipped inside the channel section 10c. The longitudinal edges 10b of the
 20 channel section are a distance apart that is slightly smaller than the distance defined between the respective bottoms of the two indentations 2c, 3c, thus allowing the two parts 2, 3 to be held by clamping.

Figure 9 illustrates another embodiment whereby the comb 1 is assembled
 25 by wedging. In this embodiment, the two parts 2, 3 of the comb 1 are connected by a film hinge 4 and each forms a portion of an arc of a cylinder 2b, 3b located on the portion of the comb 1. These cylindrical-arc portions are located on the opposite side of the teeth 2a, 3a with respect to the film hinge 4. The cylindrical-arc portions 2b, 3b, when the comb is in the
 30 assembled position, define a channel section extending over an angular extent slightly greater than 180° , thus allowing the free end of a cylindrical wand 10a of appropriately chosen diameter to be inserted therein by snap-

fastening. Thus, the two parts 2, 3 are kept in the assembled configuration and fixed to an element for grasping carrying the wand 10a.

Figure 10 illustrates another embodiment whereby the parts 2, 3 each
5 comprise a base 2b, 3b oriented along an axis X. Each base carries a number of teeth 2a, 3a. The bases 2b, 3b are connected by a film hinge 304 oriented along an axis Y perpendicular to the axis X. At its free end, each part 2, 3 has an extension 6a, 6b, the role of which will be explained hereinbelow. To assemble the comb 301, the parts 2, 3 are folded over on
10 themselves by pivoting about the axis Y. In this configuration, the extensions 6a, 6b face each other. The film hinge 304, when the two parts have been assembled, forms a free end of the comb, the other end being formed by the extensions 6a, 6b. The assembly of the two parts is consolidated by push-fitting the two ends 6a, 6b into the free end of a
15 hollow wand, in a similar way to the way described with respect to the embodiment according to figure 3.

An applicator set A is depicted in figure 11. This set comprises a container
11 containing a reserve of a cosmetic and/or treatment product P for the
20 eyelashes or eyebrows, for example mascara.

The container 11 has a threaded neck 30 onto which an applicator 13 is fitted, removably. The applicator 13 consists of a gripping handle 10 comprising, on the side intended to be fitted onto the container 11, an
25 emerging wand 10a of axis X. The gripping handle 10 constitutes a cap for closing the container, designed to be screwed onto the neck 30. The free end 10b of the wand 10a has a blind bore 12 into which a free end 6 of an applicator comb 1 is fixed. This comb has a configuration more or less similar to the configuration of the applicator comb described previously with
30 reference to figures 1 to 4.

Internally, the opening 11a of the container 11 is fitted with a wringing-out member 19 consisting of a block of elastically deformable open-cell or semi-open-cell foam, inserted in an interior portion 30a of the neck 30. The block of foam 19 has a central passage 19a through which the applicator comb 1 and a portion of the wand 10a to which it is secured can pass. The passage 19a makes it possible, as the applicator is being extracted from the container, for the product P to be spread out between the teeth of the comb and for any excess product P to be removed.

- 10 The wand 10a may be rigid or semi-rigid. It has been depicted as being straight but other alternatives could be curved.

Of course, the invention is not restricted to the exemplary embodiments which have just been described, and the embodiment particulars of the various exemplary embodiments which have just been described could, in particular, be combined with one another.

The comb may be made of more than two parts, thus making it possible to produce a comb with three or four rows of teeth, or even more.

The teeth may have a height which varies according to the axial position along the applicator element, for example a height which increases, decreases, decreases then increases or increases then decreases, from front to back.

The teeth may have a surface finish that makes it possible to increase the amount of product with which the comb can be laden; the teeth may thus have capillary grooves. Furthermore, at least one portion of at least one of the parts of the comb may be provided with flocking.

If appropriate, as the parts intended to form the comb are being assembled, a layer of absorbent material may be inserted between two or more of the

parts. This arrangement makes it possible to increase the product absorption and improve the spreading of the product along the eyelashes or eyebrows. Such a layer of absorbent material is chosen, for example, from open-cell or semi-open-cell foams, felts, wovens and nonwovens. The
5 thickness of such an absorbent layer may preferably be in a range between 0.1 mm and 1 mm.

The teeth may be covered with a coating such as a varnish, for example, intended to confer on them better ability to glide along the eyelashes, or, on
10 the other hand, greater roughness. Alternatively, the thermoplastic may contain an appropriate quantity of agents intended to improve the slip along the keratinous fibers, such as graphite, molybdenum disulfide or Teflon.

The eyelash or eyebrow applicator comb of the invention is preferably
15 made by the injection-molding of a thermoplastic, of more or less rigid or semi-rigid consistency or made of elastomer, particularly a thermoplastic elastomer of appropriate flexibility. The parts of which the comb is made may be made of different materials.

Claims

1. A comb (1, 101, 201, 301) for applying a product to keratinous fibers, particularly the eyelashes or eyebrows, comprising an arrangement of teeth (2a, 3a) capable of applying said product, characterized in that said arrangement of teeth is obtained by assembling at least two separate parts (2, 3).
2. The comb (1, 101, 301) as claimed in claim 1, characterized in that the parts (2, 3) are obtained by molding thermoplastic in a single piece and are joined together pivotably by a film hinge (4, 304).
3. The comb (1, 101, 301) as claimed in claim 2, characterized in that, after molding, the parts (2, 3) are assembled by snap-fastening, by welding or by bonding.
4. The comb (201) as claimed in claim 1, characterized in that the parts are obtained by molding separate thermoplastic parts (202, 203) which are then assembled by snap-fastening (206, 207), by welding or by bonding.
5. The comb (1, 101, 201, 301) as claimed in any of the preceding claims, characterized in that at least one of the parts (2, 3) comprises a succession of teeth configured in the form of at least one row connected to a base (2b, 3b) of elongate shape extending along an axis (X).
6. The comb as claimed in any of the preceding claims, characterized in that the teeth (2a, 3a) are offset in a staggered configuration alternating from side to side of a surface (S) formed, in particular, of a plane along which the two parts (2, 3) meet.

7. The comb as claimed in claim 5 or 6, characterized in that, when viewed along the axis (X), two consecutive teeth (2a, 3a) have free ends which diverge, which converge or which cross.

5 8. The comb as claimed in claim 6 or 7, characterized in that, when viewed from the side, two consecutive teeth have free ends which diverge, which converge or which cross.

9. The comb as claimed in claim 7 or 8, characterized in that, when viewed
10 from the side, two consecutive teeth (2a, 3a) form between them a notch (E), particularly a V-shaped notch.

10. The comb as claimed in any of claims 6 to 9, characterized in that the teeth have front and/or rear faces which are parallel to the meeting surface
15 and which form an acute obtuse angle therewith.

11. The comb as claimed in any of the preceding claims, characterized in that it is secured to an element (10, 20) for grasping.

20 12. The comb as claimed in any of the preceding claims, characterized in that the two parts are assembled by snap-fastening means (206, 207), said snap-fastening means consisting of at least one male/female system with two complementary elements, one arranged on a first part (2) and the other on a second part (3) of the comb.

25 13. The comb (301) as claimed in any of claims 2 and all those dependent thereon, characterized in that the film hinge (304) is oriented at right angles to the axis (X).

30 14. The comb (1, 101) as claimed in any of claims 2 and all those dependent thereon, characterized in that the film hinge (4) is oriented parallel to the axis (X).

15. The comb (301) as claimed in claim 13, characterized in that it is fixed to said element (10) for grasping by an end (6a, 6b) located away from the film hinge (4).

5

16. The comb (1, 101, 201) as claimed in any of the preceding claims, characterized in that it comprises means (10a) capable of consolidating the assembly of the two parts (2, 3).

10 17. The comb (1, 101, 201) as claimed in any of claims 2 to 16, characterized in that the thermoplastic contains agents intended to improve the slip along the eyelashes, such as graphite, molybdenum disulfide or Teflon.

15 18. The comb (1, 101, 201) as claimed in any of claims 1 to 17, characterized in that the parts (2, 3) are made of different materials.

19. The comb (1, 101, 201) as claimed in any of the preceding claims, characterized in that at least one portion of at least one of the parts is
20 covered in flocking.

20. The comb (1, 101, 201) as claimed in any of the preceding claims, characterized in that, as the parts are being assembled, a layer of absorbent material is inserted between two parts.

25

21. The comb (1, 101, 201) as claimed in the preceding claim, characterized in that said absorbent material is chosen from open-cell or semi-open-cell foams, felts, wovens and nonwovens.

30 22. A set (A) for applying a product (P), particularly a cosmetic product, to the eyelashes or eyebrows, comprising a container (11) for containing a reserve of product (P), possibly a wringing-out member (19), and an

applicator (13) capable of being arranged removably on the container, said applicator comprising an element (10, 20) for grasping equipped with a comb (1, 101, 201, 301) as claimed in any of the preceding claims.

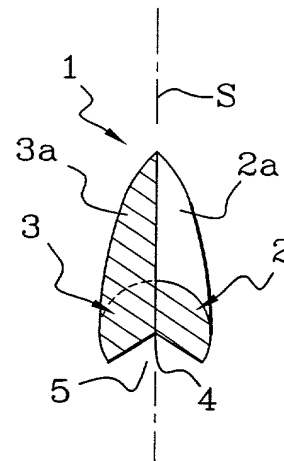
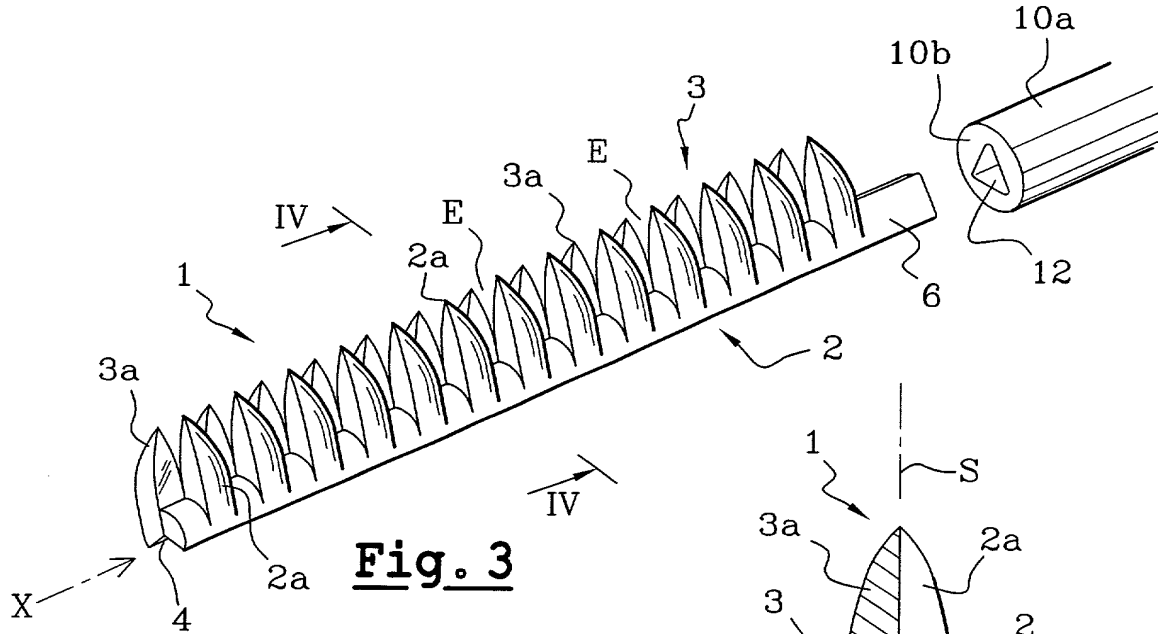
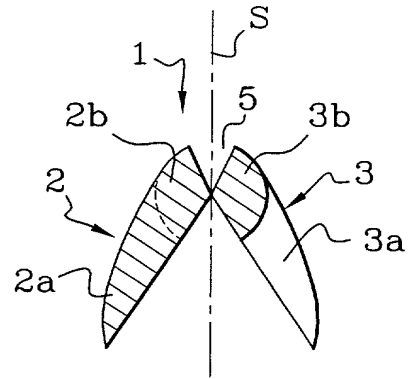
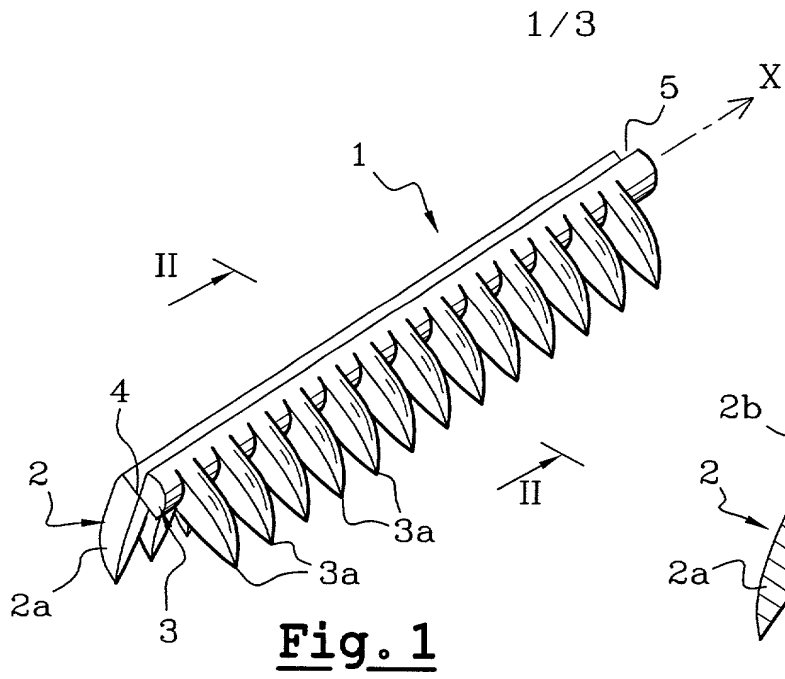
5

23. The use of a set (A) as claimed in the preceding claim for applying make-up to the eyelashes or eyebrows.

T04T50" 60448250

The invention concerns a comb (1) for applying a product on keratinous fibres, comprising and arrangement of teeth (2a, 3a) for applying said product. The invention is characterised in that said arrangement of teeth is obtained by assembling at least two separate parts (2, 3). The invention also concerns an application set equipped with such comb (1), and its use for applying make-up on eyelashes or eyebrows.

T02750-507/8260



2/3

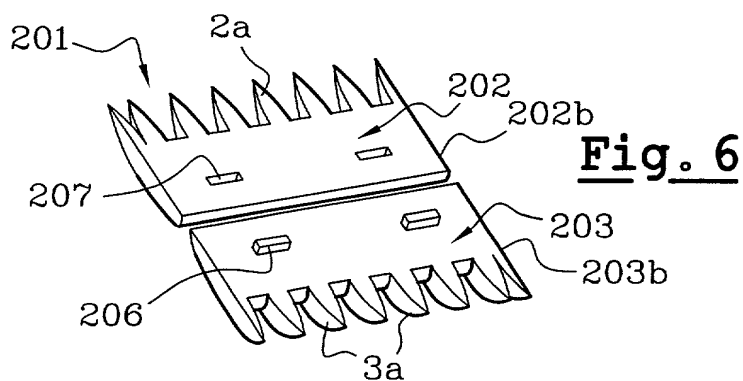
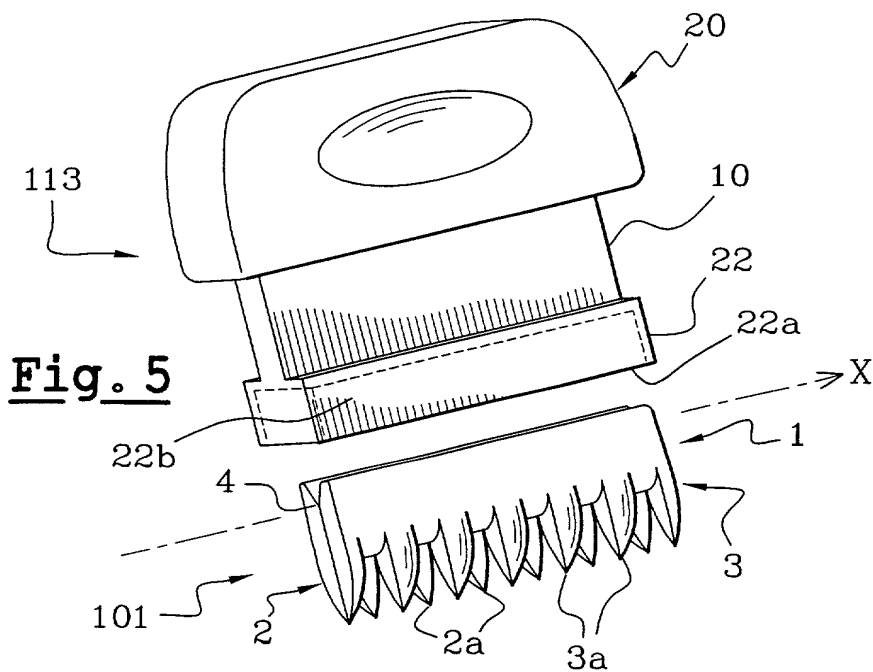
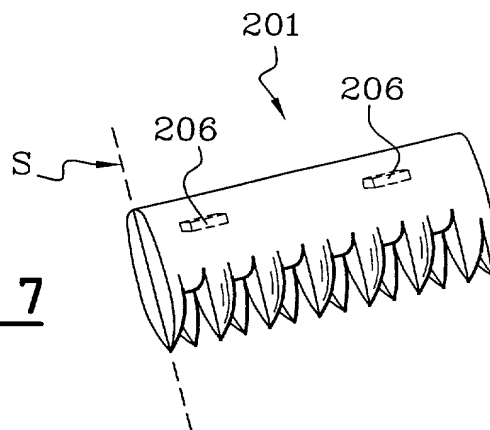


Fig. 7



09787409-091701

3/3

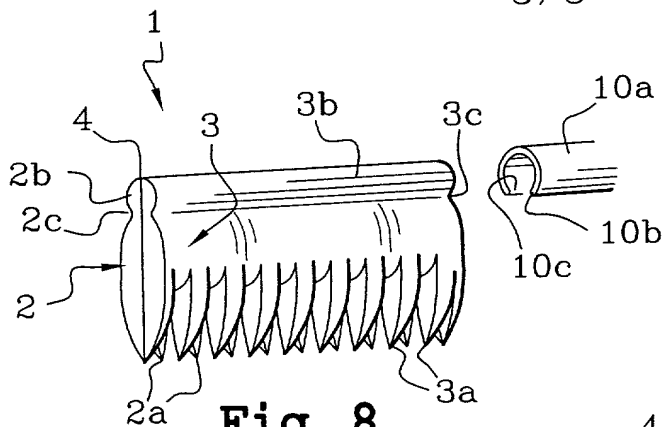


Fig. 8

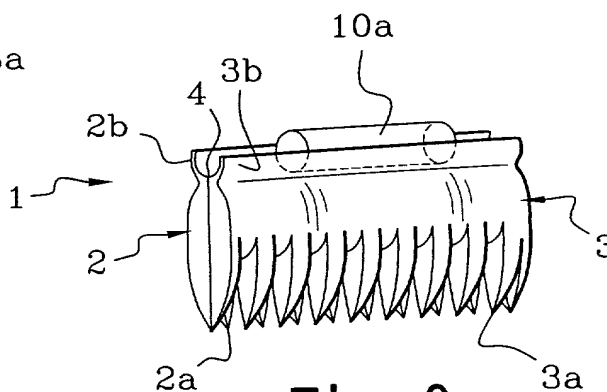


Fig. 9

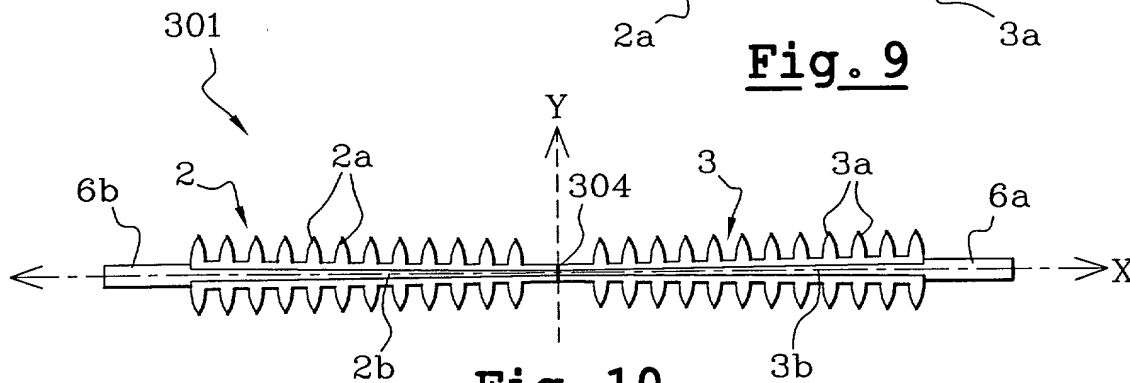


Fig. 10

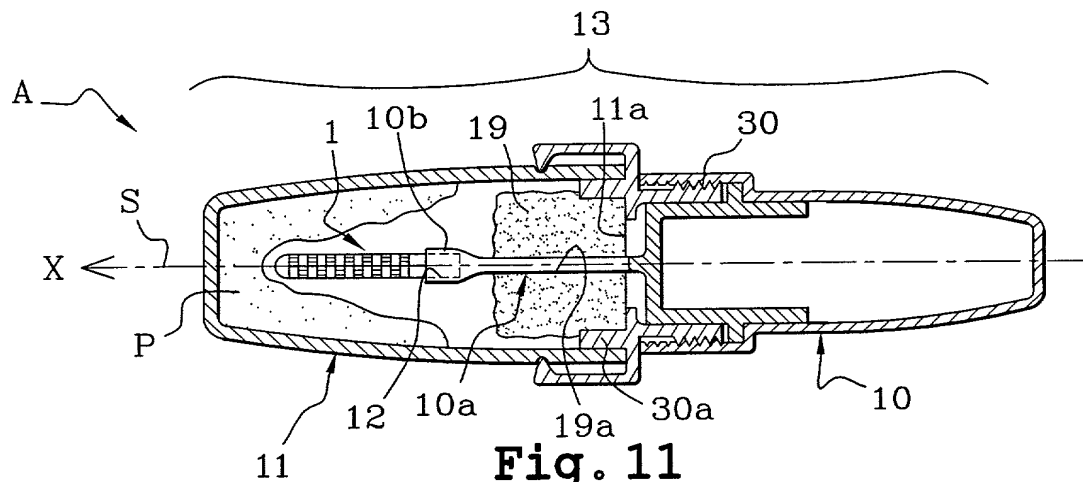


Fig. 11

09787409.00101

Declaration, Power Of Attorney and Petition

Page 1 of 2

WE (I) the undersigned inventor(s), hereby declare(s) that:

My residence, post office address and citizenship are as stated below next to my name,

We (I) believe that we are (I am) the original, first, and joint (sole) inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled

COMB FOR APPLYING A PRODUCT TO KERATINOUS FIBERS, APPLICATOR SET

EQUIPPED THEREIN AND USE OF THIS SET

the specification of which

☐ is attached hereto.

☒ was filed on 21 MARCH 2001 as

Application Serial No. 09/787,409

and amended on .

☒ was filed as PCT international application

Number PCT/FR00/01458

on 26 MAY 2000 ,

and was amended under PCT Article 19

on (if applicable).

We (I) hereby state that we (I) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We (I) acknowledge the duty to disclose information known to be material to the patentability of this application as defined in Section 1.56 of Title 37 Code of Federal Regulations.

We (I) hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s)

Application No.	Country	Day/Month/Year	Priority Claimed	
99/09451	FRANCE	21 JULY 1999	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No

We (I) hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

We (I) hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status (pending, patented, abandoned)
------------------------	-------------	---------------------------------------

PCT/FR00/01458	26 MAY 2000	
_____	_____	_____
_____	_____	_____
_____	_____	_____

And we (I) hereby appoint: Norman F. Oblon, Reg. No. 24,618; Marvin J. Spivak, Reg. No. 24,913; C. Irvin McClelland, Reg. No. 21,124; Gregory J. Maier, Reg. No. 25,599; Arthur I. Neustadt, Reg. No. 24,854; Richard D. Kelly, Reg. No. 27,757; James D. Hamilton, Reg. No. 28,421; Eckhard H. Kuesters, Reg. No. 28,870; Robert T. Pous, Reg. No. 29,099; Charles L. Gholz, Reg. No. 26,395; William E. Beaumont, Reg. No. 30,996; Jean-Paul Lavalleye, Reg. No. 31,451; Stephen G. Baxter, Reg. No. 32,884; Richard L. Treanor, Reg. No. 36,379; Steven P. Weihrouch, Reg. No. 32,829; John T. Goolkasian, Reg. No. 26,142; Richard L. Chinn, Reg. No. 34,305; Steven E. Lipman, Reg. No. 30,011; Carl E. Schlier, Reg. No. 34,426; James J. Kulbaski, Reg. No. 34,648; Richard A. Neifeld, Reg. No. 35,299; J. Derek Mason, Reg. No. 35,270; Surinder Sachar, Reg. No. 34,423; Jeffrey B. McIntyre, Reg. No. 36,867; William T. Enos, Reg. No. 33,128; Michael E. McCabe, Jr., Reg. No. 37,182; Bradley D. Lytle, Reg. No. 40,073; and Michael R. Casey, Reg. No. 40,294; our (my) attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent Office connected therewith; and we (I) hereby request that all correspondence regarding this application be sent to the firm of OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C., whose Post Office Address is: Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202.

We (I) declare that all statements made herein of our (my) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Jean-Louis H. GUERET
NAME OF ~~FIRST~~ SOLE INVENTOR

Residence: 27, avenue Raymond Poincare,
F-75016 Paris, FRANCE

Jean-Louis H. GUERET
Signature of Inventor

Citizen of: FRANCE

Post Office Address: SAME AS ABOVE

✓ 23-07-01
Date